

REMARKS

Specification Amendments

The headings and paragraphs requested by the Examiner have been added by amendment to the specification. Inasmuch as the specification immediately starts with a detailed description of the invention after the description of related art, a brief description of the invention has been inserted based on the first portion of the paragraph at page 2, line 10 of the specification, and disclosure in the Abstract. No new matter has been added.

Claim Amendments

It is noted that Groups I-VII in the restriction requirement of January 23, 2008 have now been combined. It is therefore understood that Applicants' election of Group VII will now be construed as an election of Groups I-VII, which together encompass the full scope of the compound/composition invention. Process or method Groups VIII-XXXI remain separate and non-elected, comprising claims 7, 9 and 11-15.

Claim 10 has been cancelled as being in a "use" format not generally accepted under U.S. practice. Non-elected claims 7, 9 and 11-15 have been designated as "withdrawn", and new compound claims 16-20 have been added, each of which falls within the compound scope of elected Groups I-VII. The remaining claims have been amended as follows, including withdrawn claims so as to maintain them of a comparable compound scope and proper condition for rejoinder upon allowance of compound claims:

- The term 'solvate' has been deleted from all claims.
- **Claim 1:** The definition of R¹ to R³ has been amended to specify that these substituents are selected from hydrogen, chlorine, fluorine and cyano. The definition of R⁴ has been amended to specify that this substituent is halogen, CO₂R¹² or C₁₋₆ alkoxy. The definition of R⁵ and R⁶ has been amended to exclude substituents containing cyclic moieties.
- **Claim 2:** Amended to specify that R¹ and R² are chloro at the 2- and 3-positions of the phenyl ring and R³ is hydrogen; for basis see page 5, lines 18-20 of the application as filed.
- **Claim 3:** Amended to specify that R⁴ is C₁₋₆ alkoxy.

- **Claims 4 and 5:** Amended to accord with amended claim 1 and to correct the claim dependencies.
- **Claims 6 and 7:** Amended to accord with amended claim 1.
- **Claim 9:** Amended to correct claim dependency.
- **Claim 10:** Cancelled.
- **Claim 11:** Amended to accord with amended claim 1 with the exception that substituents R¹ to R³ may also be bromine.
- **Claim 14:** Amended to physically insert the definition of the compound of formula (IB) from claim 11 rather than incorporating this definition by reference to claim 11.
- **New claims 16 to 20** specifically claim the compounds of Examples 30, 120, 127, 129 and 138.

These amendments are being made without disclaimer or prejudice to Applicants' right to prosecute any subject matter deleted thereby in one or more divisional or continuation applications. It should be apparent from the above that these amendments do not introduce new matter, and entry thereof is therefore believed to be in order and is respectfully requested. Following entry of these amendments, claims 1-9 and 11-20 are pending in this application, with claims 7, 9 and 11-15 being designated as "withdrawn."

Specification Objection/Amendment

Although the guidelines of 37 CFR 1.77(b) are, in fact, only guidelines and not generally mandated, the headings and paragraphs requested by the Examiner have been inserted by amendment as best feasible in this US National Stage of a PCT application.

Claim Objections

Claim 10 has been cancelled as being in a "use" format not generally accepted under U.S. practice, thereby obviating this objection with respect to claim 10.

Claims 4 and 5 have been made dependent on claim 1 only, thereby overcoming this objection with respect to their improper multiple dependency.

Claim Rejections - 35 USC § 112, 1st paragraph

Claims 1-6, 8 and 10 are rejected under 35 U.S.C. 112, first paragraph, for the stated reason that the specification, “while being enabling for a 2-pyrazinyl benzenesulphonamide compound where R¹, R², and R³ are halogen, alkyl or cyano and R⁴ is halogen, alkoxy, or a carboxylic ester, does not reasonably provide enablement for all of the other R groups listed nor any solvates within the broad Claim 1.” Thus the Examiner asserts that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. (Action at pages 4-5).

While Applicants do not necessarily agree with this rejection, it is respectfully submitted that this ground for rejection has been overcome by the above amendments to claim 1 and comparable amendment to the claim scope in the other claims, whereby the definition of substituents R¹ to R⁴ have been limited to recite groups exemplified in the specification. Accordingly, this ground for rejection should be withdrawn.

The claims are further rejected at pages 6-7 of the Action as not being enabled with respect to the scope of “solvate” recited in the claims. Again, without necessarily agreeing with this ground for rejection, it has been overcome by the removing the specific recitation of “solvate” from the claims. Recitation of the term “solvate” in these claims is in any event redundant, and its removal is not intended to and does not reduce the scope of the claims in any respect, inasmuch as the present claims, being directed to chemically defined compounds, would also cover such compounds in the form of a solvate, whether or not in the term “solvate” appears in the claims. In other words, a claim to a novel compound *per se* encompasses such compound, regardless of its state of solvation or hydration, or its polymorphic form, and regardless of whether it is a racemic mixture or a resolved enantiomer.

Claim Rejections - 35 USC § 112, 2nd paragraph

At page 9 of the Action, claims 1-5, 8 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner asserts that the “scope of ‘5- to 7-membered heteroaromatic ring’ or ‘4- to 8-membered saturated ring containing 1-3 heteroatoms’

requires clarification since applicants' examples in the specification are not limited to the examples defined.”

While Applicants do not necessarily agree with this ground for rejection, it has been overcome by the above amendments whereby the definition of substituents R⁵ and R⁶ have been amended to exclude substituents containing cyclic moieties, thus obviating the Examiner's objection to the terms “5- to 7-membered heteroaromatic ring” or “4-8-membered saturated ring containing 1-3 heteroatoms.”

At page 10 the Action claim 3 is also rejected under 35 U.S.C. 112, second paragraph, as being indefinite, the Examiner commenting that “claim 3 discusses three R groups, yet defines them in an ‘either/or’ fashion, insinuating only 2 groups.” It is believed that the Examiner intended to refer to claim 2 rather than claim 3 (which refers only to R⁴). This ground for rejection has been overcome by the above amendment to claim 2 whereby claim 2 now reads, “a compound according to claim 1 in which R¹ and R² are chloro at the 2- and 3-positions of the phenyl ring and R³ is hydrogen.”

Claim Rejections - 35 USC § 103

At page 10 of the Action, claims 1-6, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esche, J. *et al.*, in view of *In re Hass*, and *In re Henze*. The Examiner asserts that Esche *et al.* teaches a compound that “is identical to a compound of the current application but for one issue,” noting that “claim 1 of the current application provides a proviso that does not permit R⁵ to be hydrogen or bromo if one of R¹, R², and R³ is a methyl group and the other two are hydrogen, and the methyl group is para to the sulfonamide group.”

It is respectfully submitted that any basis for this ground for rejection has been overcome by the above amendment to claim 1, which now specifies that R¹ to R³ are selected from hydrogen, chlorine, fluorine and cyano. As such the claim no longer encompasses any compound wherein R¹ to R³ is a C₁₋₆ alkyl group (*e.g.* ethyl), and the claimed compounds cannot be regarded as homologous to those described in the cited Esche *et al.* reference. Therefore, the present claims are now clearly structurally distinguished over the cited prior art and are not obvious there over. Moreover, the presently claimed compounds have activity as CCR4 antagonists and this activity could not have been predicted from the prior art.

It is therefore respectfully requested that this obviousness ground for rejection be withdrawn.

Obviousness-Type Double Patenting

At page 15 of the Action, claims 1-6, 8 and 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent Application Publication No. 2006/0122195. The Examiner asserts that “although the conflicting claims are not identical, they are not patentably distinct from each other because Claim 1 of U.S. Patent Application Publication No. 2006/0122195 embraces the instant claims 1-6, 8 and 10.”

The referenced published application is currently pending before Examiner Jeffrey Murray, and a non-final rejection was mailed November 14, 2008 in which all claims were rejected. Therefore, this rejection remains “provisional,” and Applicants are unable to respond unless and until claims are fixed in scope and allowed and ready to issue in the referenced application.

Updated Table of Related Applications

The Examiner’s attention is directed to the following co-pending U.S. patent applications and patents of Applicants’ assignee, which may be considered technically related to the present application:

Inventor	U.S. Serial No. Filing Date	U.S. Pub. No. Publication Date	PCT Pub.No. PCT Pub. Date	Status
Baxter <i>et al.</i>	10/499,102 November 23, 2004	7,410,972 August 12, 2008	WO 03/051870 June 26, 2003	Patented
Harrison <i>et al.</i>	10/559,312 December 2, 2005	US 2006-0122195 June 8, 2006	WO 2004/108692 December 16, 2004	Assigned to Examiner Jeffrey H. Murray in GAU 1624; Non Final Action Mailed 14- Nov-2008.
Mete <i>et al.</i>	10/559,295 January 1, 2005	US 2006-0128723 June 15, 2006	WO 2004/108717 December 16, 2004	Abandoned
Cheshire <i>et al.</i>	10/559,202 December 2, 2005	US 2006-0189613 August 24, 2006	WO 2004/108690 December 16, 2004	Assigned to Examiner Deepak R. Rao in GAU 1624; Non Final Action Mailed 09-29-2008.

Inventor	U.S. Serial No. Filing Date	U.S. Pub. No. Publication Date	PCT Pub.No. PCT Pub. Date	Status
Baxter <i>et al.</i>	10/570,178 February 24, 2006	US 2007-0093491 April 26, 2007	WO 2005/021513 March 10, 2005	Notice of Allowance Mailed December 4, 2008.
Cheshire et al.	12/096,513 June 6, 2008	US 2008-0293742 November 27, 2008	WO 2007/069978 June 21, 2007	Assigned to Examiner Douglas M. Willis in GAU 1624; Restriction Requirement Mailed 03-11-2009

With the exception of a published PCT application listed in the above table in bold (for which a copy was provided with previously filed Information Disclosure Statement), each of the published US applications and PCT applications is listed on the form PTO-1449 attached to the Information Disclosure Statement being submitted herewith, and a copy of each listed published PCT application is provided with the Information Disclosure Statement. US Application 10/499,102 was cited in the table included with the Information Disclosure Statement filed herein on October 13, 2005 and the corresponding published PCT application was then cited and provided.

It is assumed that the Examiner has ready electronic access to each of the listed US applications, but the undersigned will provide a copy of any document from these files if requested by the Examiner.

Conclusion

All grounds for rejection having been addressed and, it is believed, overcome, all claims should now be in condition for allowance, and a Notice to that effect is respectfully requested.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Director is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit

Account 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully Submitted,
Morgan Lewis & Bockius LLP

Date: **May 5, 2009**
Morgan Lewis & Bockius LLP
Customer No. **09629**
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Tel. No.: 202-739-3000

By: /Donald Bird/
Donald J. Bird
Registration No. 25,323
Tel. No.: (202) 739-5320
Fax No.: (202) 739-3001